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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,786	12/11/2000	Yasushi Ichikawa	Q62216	2733

7590 07/13/2005

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2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3202

EXAMINER
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DUONG, THANH P

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/732,786

Applicant(s)

ICHIKAWA ET AL.

Examiner

Tom P. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 16-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 16-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Applicants' remarks and amendments filed on April 25, 2005 have been carefully considered. Claim 6 has been amended. Claims 13-15 have been canceled. New claims 21-37 have been added. Claims 1-12 and 16-37 are pending in this application.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Takemura et al. (5,733,977). Takemura discloses a golf ball having at least two pieces (Col. 4, lines 50-58) comprising: a core (1) portion formed of a composition based on at least one of primary resins selected from one group consisting of an ethylene ionomer resin, polyester elastomer, polyurethane elastomer, polyolefin elastomer, polyamide elastomer, polyolefin resin, and styrene block copolymer (Col. 3, lines 18-24) which has blended and uniformly dispersed therein at least one of a silicone rubber powder, a silicone resin powder, and a composite powder thereof in a powder form (Col. 2, lines 6-10).
2. Claims 1-2, 5-7, 9-12, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sullivan (6,270,429). Regarding claims 1, 7, 9-10, and 17, Sullivan

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discloses a golf ball having at least two pieces (Col. 4, lines 62-67) comprising: a cover (one or more mantle layers) portion formed of a composition based on at least one of primary resins selected from one group consisting of an ethylene ionomer resin, polyester elastomer, polyurethane elastomer, polyolefin elastomer, polyamide elastomer, polyolefin resin, and styrene block copolymer (Col. 3, lines 42-43) which has blended and uniformly dispersed therein at least one of a silicone rubber powder, a silicone resin powder, and a composite powder thereof in a powder form (Col. 2, lines 28-38). Regarding claim 2, Sullivan discloses the composite powder comprises silicone rubber particles surface coated with a silicone resin (Col. 6, lines 38-55). Regarding claims 5-6, and 18-20, Sullivan discloses the silicone rubber powder has particle sizes and the blended amount as claimed (Col. 6, lines 32-38 and Col. 5, lines 15-21). Regarding claims 11 and 12, Sullivan discloses the ethylene ionomer resin (Col. 12, lines 8-50) and a Shore D hardness and a meth(acrylic) acid content (Col. 12, lines 53-60) of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan '429 in view of Ueshima et al. (5,502,095). Regarding claims 3-4, and 8, Sullivan '429 does not disclose expressly the type of silicone rubber powder with functional group of the claimed invention. Ueshima et al. discloses the thermoplastic elastomer composition consist of component (C), polyorganosiloxane. Polyorganosiloxane is blended with resin or rubber or filler such as a silicone rubber powder. (Col. 6, line 61-65). Ueshima further teaches that this blended composition can be used as an elemental material for sport and leisure goods (e.g. golf club grip, baseball ball bat grip, swimming and etc.) and other rubber contacts (Col. 11, lines 40-45). The use of such polyorganosiloxane improves material properties such as fatigue resistance, abrasion resistance, and flexibility (Col. 11, lines 25-27). Ueshima et al. discloses the thermoplastic elastomer composition consist of component (C), polyorganosiloxane. Polyorganosiloxane is blended with resin or rubber or filler such as a silicone rubber powder (Col. 6, line 61-65). Thus, it would have been obvious in view of Ueshima to one having ordinary skill in the art to modify the silicone cover (mantle layers) of Sullivan with polyorganosiloxane as taught by Ueshima in order to gain the above benefits. In addition, such commercially available silicone resin powder is known in the art and it would have been obvious to use such silicone rubber powder here to improve hardness and durability. Furthermore, Applicant has not disclosed the advantage and/or criticality of using the silicone rubber powder with such functional groups; thus, it appears the material selection is an obvious matter of design choice.

Therefore, it appears the silicone resin powder of above applied references provide a golf ball with the same performance as the claimed invention.

4. Claims 19 and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura et al. '977. Takemura '977 discloses the silicone powder is finely dispersed in the styrene-butadiene rubber (styrene block copolymer) (Col. 6, lines 6-12) but does not disclose expressly the particle size distributions of the claimed invention. However, it would have been prima facie obviousness to optimize the silicone rubber powder with particle size distributions of the claimed invention to provide a golf ball with high rebound performance and hitting feel (Col. 6, lines 6-12), since the particle size distributions are recognized to one having ordinary skill in the art as a result-variable thru routine optimization (See *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)).

5. Claims 21-25 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan '429. Sullivan '429 discloses the granules (silicone powder) is finely dispersed in the matrix (styrene-butadiene rubber or styrene block copolymer) (Col. 6, lines 32-48) but does not disclose expressly the particle size distributions of the claimed invention. However, it would have been prima facie obviousness to optimize the silicone rubber powder with particle size distributions of the claimed invention to provide a golf ball with good distance, durability, and hitting feel (Col. 1, lines 25-31), since the particle size distributions are recognized to one having ordinary skill in the art

as a result-variable thru routine optimization (See *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977 and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)).

### ***Response to Arguments***

Applicant's arguments filed 4/25/05 have been fully considered but they are not persuasive. With respect to the argument of Takemura fails to disclose the cover composition of the claimed invention, Examiner respectfully disagrees. Takemura discloses the styrene block copolymer (Col. 3, lines 19-20) and mixing of the silicone rubber powder with diene rubber (Col. 3, lines 8-10) of the claimed invention. With respect to the argument of the silicone rubber powder of Sullivan '429, Sullivan '429 defines the foam granules may be open or closed cell structure and the silicone powder of the claimed invention is either open or closed cell structure. Applicants' submission of the Appendix has been carefully reviewed and the properties of the silicone powder do not show distinction and/or unexpected results over the silicone powder as described above. With respect to the argument of the composition of Ueshima provides a low resilience, Examiner respectfully disagrees. There is no suggestion that the composition of Ueshima provides a low resilience.

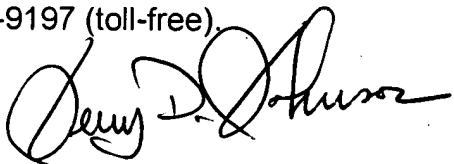
### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P. Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong  
June 29, 2005  
TD



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